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# EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr Hae-Chan Park (reg.50114) on February 17, 2010.

3. The applicant has been amended as follow:

1. (Currently amended) ~~An apparatus~~ A system for providing inter-processor communication using transmission control protocol/Internet protocol in a communication system, the ~~apparatus~~ system comprising:

an access network controller (ANC); and

a plurality of ethernet devices,

wherein the ANC and the plurality of ethernet devices communicate with each other by transmission control protocol/Internet protocol through an Ethernet network, and

wherein at least one of the ANC and the plurality of ethernet devices comprises:

an Ethernet interface module providing an interface between an Ethernet device driver and an inter-processor communication module, determining a type of a received message, transmitting the message when the determined type of the message is a first message, queuing the message in a first mailbox corresponding to a second message when the determined type of the message is the second message;

a message process module receiving the message transmitted by said Ethernet interface module, queuing the message received from said Ethernet interface module in a second mailbox corresponding to the first message; and

a common application programming interface module providing an interface for performing data transmission and reception through said message process module, for management of the first and second mailboxes, for inter-processor communication buffer management, and for an inter-processor communication control function, said common application programming interface module being in communication with said Ethernet interface module and said message process module.

2. (Currently amended) The ~~apparatus~~ system of claim 1, said message process module determining a number of messages queued in the second mailbox, deleting oldest messages from the second mailbox, and queuing latest messages in the second mailbox when the number of messages is greater than a predetermined number of messages.

3. (Currently amended) The ~~apparatus~~ system of claim 1, said common application programming interface module, Ethernet interface module, and message process module communicating with each other in accordance with transmission control protocol/Internet protocol.

4. (Previously presented) A system providing inter-processor communication using transmission control protocol/Internet protocol, the system comprising:

an access network controller being coupled to an Ethernet network and operating in accordance with software instructions corresponding to 1x evolution-data only (1xEV-DO);

a wide area switching module being coupled to the Ethernet network and performing operation and state management;

a data location register being coupled to the Ethernet network, performing subscriber management and providing session information to said access network controller;

an element management system being coupled to the Ethernet network and performing operation and management of the Ethernet network and said data location register;

a server being coupled to the Ethernet network and performing authentication for a 1x evolution-data only (1xEV-DO) subscriber; and

an access network transceiver system transmitting 1x evolution-data only (1xEV-DO) data and signaling data to said access network controller through the Ethernet network;

said access network controller performing a matching function with said access network transceiver system for a packet data service, and performing call processing corresponding to 1x evolution-data only (1xEV-DO);

said access network controller, wide area switching module, and element management system communicating with each other by transmission control protocol/Internet protocol through the Ethernet network;

at least one communication subsystem;

wherein the communication subsystem comprising

an Ethernet interface module providing an interface between an Ethernet device driver and an inter-processor communication module, the Ethernet device driver being communication with the Ethernet network. said Ethernet interface module determining a type of a received message, transmitting the message when the determined type of the message is a first message, queuing the message in a first mailbox corresponding to a second message when the determined type of the message is the second message;

a message process module receiving the message transmitted by said Ethernet interface module, queuing the message received from said Ethernet interface module in a second mailbox corresponding to the first message; and

a common application programming interface module providing an interface for performing data transmission and reception through said message process module, for management of the first and second mailboxes, for inter-processor communication buffer management, and for an inter-processor communication control function, said common application programming interface module being in communication with said Ethernet interface module and said message process module, the inter-processor communication module being selected from among said access network controller, said wide area switching module, and said element management system.

5. (Original) The system of claim 4, said server corresponding to an access network-authorization, authentication, accounting server providing system management, an operator interface, and a graphic user interface for maintenance.

6. (Original) The system of claim 5, the system corresponding to an Internet protocol based evolution-data only (EV-DO) system.

7. (Canceled)

8. (Original) The system of claim 6, said message process module determining a number of messages queued in the second mailbox, deleting oldest messages from the second mailbox, and queuing latest messages in the second mailbox when the number of messages is greater than a predetermined number of messages.

9. (Original) The system of claim 8, said common application programming interface module, Ethernet interface module, and message process module communicating with each other in accordance with transmission control protocol/Internet protocol.

10. (Original) The system of claim 9, the communication subsystem including software for transmitting and receiving the messages between application tasks in said access network controller, wide area switching module, and element management system.

11. (Previously presented) A method providing inter-processor communication using transmission control protocol/Internet protocol in a communication system, the method comprising:

operating an access network controller in accordance with software instructions corresponding to 1x evolution-data only (1xEV-DO), the access network controller being coupled to an Ethernet network, the access network controller performing call processing corresponding to 1x evolution-data only (1xEV-DO);

performing operation and state management with a wide area switching module coupled to the Ethernet network;

performing subscriber management with a data location register coupled to the Ethernet network, the data location register providing session information to the access network controller;

performing operation and management of the Ethernet network and of the data location register with an element management system coupled to the Ethernet network;

performing authentication for a 1x evolution-data only (1xEV-DO) subscriber with a server coupled to the Ethernet network;

transmitting 1x evolution-data only (1xEV-DO) data and signaling data to the access network controller through the Ethernet network with an access network transceiver system, the access network controller performing a matching function with the access network transceiver system for a packet data service;

performing intercommunication between the access network controller, wide area switching module, and element management system by transmission control protocol/Internet protocol through the Ethernet network;

determining a type of a received message;

transmitting the message when the determined type of the message is a first message;

queuing the message in a first mailbox corresponding to a second message when the determined type of the message is the second message;

said determining, said transmitting, and said queuing of the message in the first mailbox being performed by an Ethernet interface module provided between an Ethernet device driver and an inter-processor communication module, the inter-processor communication module being selected from among the access network controller, the wide area switching module, and the element management system, the Ethernet device driver being communication with the Ethernet network;

receiving the message transmitted by the Ethernet interface module at a message process module;

queuing the message received from the Ethernet interface module in a second mailbox corresponding to the first message, said queuing of the message in the second mailbox being performed by the message process module; and

providing a common application programming interface module for performing data transmission and reception through the message process module, for management of the first and second mailboxes, for inter-processor communication buffer management, and for an inter-processor communication control function, the common application programming interface

module being in communication with the Ethernet interface module and the message process module.

12. (Original) The method of claim 11, the server corresponding to an access network-authorization, authentication, accounting server providing system management, an operator interface, and a graphic user interface for maintenance.

13. (Original) The method of claim 12, the communication system corresponding to an Internet protocol based evolution-data only (EV-DO) system.

14. (Canceled)

15. (Previously presented) The method of claim 11, further comprising:
determining a number of messages queued in the second mailbox;
deleting oldest messages from the second mailbox; and
queuing latest messages in the second mailbox when the number of messages is greater than a predetermined number of messages, said determining of the number of messages queued in the second mailbox, said deleting of the oldest messages, and said queuing of the latest messages being performed by the message process module.

16. (Original) The method claim 15, the common application programming interface module, Ethernet interface module, and message process module communicating with each other in accordance with transmission control protocol/Internet protocol.

4. Following is an examiner's statement of reasons for allowance:

With respect to claims 1-6, 8-13, and 15-16, the prior art of record, individually or in combination, fails to teach, suggest or render obvious the claimed invention in combination with specific amended limitations as recited in claim 1.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272- 3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ***William Vaughn*** can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information

regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THANH TAMMY NGUYEN/
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